

Chapter 2

From Pragmatics to Complexity: Developments and Perspectives of Systemic Psychotherapy

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Synopsis The optics of complexity nowadays can be considered as one of the more mature and articulated developments of system thinking and has greatly contributed to renew and enrich the same epistemological basis. Coming from transversal elaborations in various fields of scientific knowledge, the “paradigms of complexity” (Morin 1977) exerted a major influence on theoretical and methodological elaboration of many disciplines of contemporary science, promoting the overcoming of reductionism residues of the mechanistic classical tradition.

In systemic psychotherapy, along with other influences, the perspective of complexity has activated in the past 30 years a process of review and conceptual enrichment which seems to invest the entire field of psychotherapy.

This healthy trend to renewal is, in general, not only linked to the large increase in demand for psychotherapy, with the extensive range of answers that it requires, but also to a fertile resumption of epistemological reflection in psychotherapy to be intended mainly as a “reflexive” operation that researches the links and correlations between therapeutic practices and theories that inspire them.

Specifically with regard to systemic therapy, there is no doubt that the encounter with the evolutionary and constructivist paradigms on one hand and, on the other hand with the perspective of complexity, has led to a healthy questioning of some conceptual assumptions.

The purpose of this chapter is precisely to try to define the essential outlines of this critical review of systems theories which are no longer definable in a univocal way and at the same time it tries to point out the inevitable influences that this renewal of theories exerted on therapeutic practices.

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The First Systemic Formulations and the Influence of G. Bateson

The general systems theory stems from the crisis of the mechanistic model, derived from Descartes and Newton, which is characterized by a rigid pattern of cause effect that proceeds through analytical scans of objects examined, fragmenting them into constituent components observed in isolation and seeking, then, between these, relationships of linear causality. The inadequacy of this model is evident because, as Bertalanffy writes (1956) “in various scientific fields issues concerning the whole, the dynamic interaction, the organization have been emerging. Within the framework of Heisenberg and quantum mechanics it has become impossible to resolve the phenomena in local events: problems of order and organization appear whether it concerns the structure of atoms and of the architecture of the protein, whether it regards the phenomena interaction in thermodynamics, or if we try to address the problems of modern biology.”

Even more so, the mechanistic model did not seem sufficient to address the study of human behaviour and mental processes to which instead the application of systemic concepts seemed to give more useful clarification.

It is to this enterprise that, in the early 1950s, Bateson and his initial group of researchers, attempt to address the sensitive area of psychopathology of schizophrenia proposing, with the help of new conceptual tools, a vision profoundly innovative (Bateson et al. 1956).

The systemic model that, in the wake of these studies, Bateson gradually develops in the decade 1950–1960, is essentially based on three assumptions:

- (a) The first is that the individual is considered as an open system capable of self-regulation, in constant exchange with the environment, in such way that the unit of study (later defined by Bateson as the “the unit of survival”) is no longer the isolated individual, but the individual “plus” environment;
- (b) The second assumption is that the exchange that takes place between the individual and its context is not an exchange of energy, but of information, which implies the norm of “retro-action” and, therefore, of circularity; the study of human behaviour is assimilated to the one of communication and, reflecting this orientation, the hypothesis is formulated that the same symptomatic behaviours are communicative behaviours, which are appropriate and consistent with specific interactive modalities of the context in which they appear;
- (c) The third assumption, that is definitely one of the most significant, is the *conception of mental processes* that Bateson gradually developed. For Bateson, the “mind”, as opposed to what was claimed by the traditional Cartesian dichotomy, is not to be separated from the soma, but it is identified with the same dynamics of systemic self-organization, expressing even the organization of all functions and assuming the character of *meta-function*, which at higher levels of complexity, acquires the typical quality non-spatial and non temporal that we attribute to mind in the traditional sense. Not only that, but Bateson in this view of “mental” takes a further step: the mind is not fully identified with the indi-

vidual, but it invests also streets and messages that connect the individual and the environment, given their inseparable correlation. In this systemic vision, which becomes truly ecological, the individual does not adapt to a given environment but the individual and the environment co-evolve.

What is essential to emphasize of this original systemic model, developed by Bateson, is how relevant *the attention is and the importance that is given to mental processes*. In fact the distance taken from psychoanalysis was certainly not linked to the fact that it was considered as a mental or intrapsychic theory, but rather because even the psychoanalytic model was referring to energy as energetic concepts, rather than information.

I would like to emphasize here, although the subject cannot be expanded in this context, how the insights Bateson had have been confirmed by recent neuroscience studies. In particular, the spectacular discovery of mirror neurons made by a group of researchers from Parma University (Gallese et al. 1996; Rizzolatti et al. 1996; Rizzolatti and Sinigaglia 2006), shows clearly how the mental functions are based on relations starting from the neurological level: the mind would not be able to develop and operate without the “nourishment” that is provided from corporal relations, from others, from the environment (for an in-depth discussion on these themes please see Onnis 2009, 2016).

Despite the great importance Bateson gave to the mental functions, the first applications of the systemic model to therapy, which occurred in the early 1960s, do wrong to this original inspiration of Bateson. In fact, assimilating reductively the systemic theory to the “cybernetics first manner”, has led to the development of a model strongly centred on the concepts of “self-correction” and “homeostasis”, rather than potential development; on the observable “pragmatic” interactions; rather than on the “semantics” of communications and consequently on complexity of meanings and of what more “mental” exists in individuals and human systems; on the possibility that the therapist provides on the treated system an “objective” description rather than on the inevitability of a co-participatory interaction between the therapist and the system itself.

This trend, which is expressed, for example, in “*Pragmatics of Human Communication*” (Watzlawick et al. 1967) and in the authors that refer to it, despite having allowed often excellent therapeutic results, proposes a systemic epistemology more reductive and still greatly affected, as we shall see later, by the mechanistic model.

Theoretical and Epistemological Developments of Systemic Psychotherapy

It is exactly this epistemology that, in recent years (approximately in the past 25 years) has undergone a major revision, as mentioned at the beginning, based on cues frequently provided by research carried out in fields unrelated to psychotherapy or

behavioural sciences, from physics, to chemistry, and biology, thereby repeating on one hand, the existence of isomorphism between different systems (in the sense of Bertalanffy) and on the other by stimulating a fruitful integration between the various fields of scientific knowledge. This interdisciplinary integration does not allow relapses in reductionist homologation of systems and different phenomena, but rather is born, this time, in recognition of “complex” realities and therefore tends to be seen as science of “complexity”.

The main aspects of this epistemological revision have been marked by three encounters:

- (a) The meeting with the *evolutionary paradigm* has questioned the rigid conception of systemic homeostasis and has affected the temporal and historical dimension of the systems and on the relationship of the present with the past and future.
- (b) The meeting with the *constructivist and self-referential orientations*, which posed the problem of the relationship between observer and observed, between therapist and system to be treated and has had therefore implications on the conception of the therapeutic relationship.
- (c) The encounter with the *perspective of complexity* which has helped to overcome the residual dichotomies, shunt mechanistic, still present in the systemic area, suggesting the existence of a multiplicity of complex levels of reality that are not in opposition with each other, but in complementary relationship.

I will try now, briefly, to better clarify which transformations caused in the systemic approach these influences and intersections.

The Encounter with the Evolutionary Paradigms from “Homeostatic” Models to “Evolutionary” Models

The so-called “homeostatic” models were certainly influenced by the fact that the first family therapists who attempted to apply the systemic theory in human systems, in particular the “Pragmatics” group from Palo Alto, i.e. from Jackson (1957) to Watzlawick et al. (1967), found themselves working with severely dysfunctional families, which presented a series of pathological conditions affecting one or more members. These families appeared as systems with self-regulation with a prevailing tendency to neutralize, through negative feedback, any amendment of its homeostasis, to a point at which any behaviour of members of the system, beginning with the symptom of the identified patient, seemed to cooperate for this purpose.

This conception, which emphasizes the homeostatic aspects of the systems and consequently neglecting symptoms and the possibilities of their evolution, is mainly affected by the influence of the conceptual framework, which is still the “first cybernetic”, i.e. cybernetics studying machines equipped exclusively of capacity for self-correction of any deviation from equilibrium, through mechanisms of negative feedback. But in the description of human systems as negative feedback loops, repetitive and immutable (a description which also contrasts

with the same vision of man as a “system of active personality” which Bertalanffy (1956) had clearly suggested), you lose especially one basic aspect: the dimension of time. The system is always equal to itself, and therefore it is a system with *no history*.

It is not difficult to understand, from these considerations, how this model still has many points of contact with the mechanistic model: despite epistemological assumptions, which are undoubtedly different, link circularly the symptom to the behaviour of other members of the family, the symptom remains a stabilizing element of the systemic disorder so, essentially expression of pathology; the dynamics of the system is evaluated mainly as an interactive game of “inputs” and “outputs”, so similar to the pattern stimulus–response, original of classical behaviourism, where you lose (or are placed in brackets in the so-called “black box”) values and meanings and all those processing elements which, between input and output, are “internal” to the system; the therapist, finally, in its claimed separated and “neutral” position, continues to consider the system as an “object” of observation, risking however to reify it, given the only apparently observable interaction in the present, in which past and future seem to dissolve.

This homeostatic model has now been widely exceeded in the systemic therapy by a significant epistemological modification, caused by the reference of new paradigms, evolutionary paradigms that helped define *evolutionary models*.

Maruyama (1963) with his concepts of “morphostasis” and “morphogenesis”, underlined the systemic tendency not only to maintain but also to “change” its shape. We can, however, say that studies that have heavily contributed to the elaboration of an evolutionary model, are those of Prigogine on the thermodynamics of non-equilibrium, coming, therefore, from a field very distant from psychotherapy.

According to Prigogine (Prigogine and Nicolis 1977; Prigogine and Stengers 1979), the balance of a system is never static, but permanently dynamic exposed to oscillations or “fluctuations” (that’s why Prigogine’s talks of “non-equilibrium systems”). If for the effect of perturbations, internal or external to the system, these fluctuations are sufficiently amplified, the system reaches a critical stage, called “bifurcation”, beyond which it may start a change of state, in directions and outcomes that are not predictable beforehand. This evolutionary trend is supported by a continuous circular interaction of positive and negative feedback that ensures the continuous development of the system, therefore we can speak of “evolutionary feedback”, clearly indicating that a system is *never equal to itself*.

A first important aspect of this view is that it reintroduces the dimension of time in the system: there is, as Prigogine says with a happy expression, an “arrow of time” that indicates the direction of development of the system and determines its “irreversibility”. This also means that, it regains importance a history of a system that, between differences and redundancies interrelated, but not identical to themselves, marks its development over time.

The implications that these new epistemological premises have on the therapeutic process are particularly significant and eliminate any mechanistic residues that the homeostatic model still seemed to contain.

First, the symptom is no longer considered as an element that tends to reinforce the pathological homeostasis of the system, but as a moment of extreme instability

of the system itself, the point of “bifurcation”, to use the terminology of Prigogine, beyond which different directions are possible as well as the evolution towards more mature levels of development. Consider how important it is, especially in situations of acute discomfort, in the “crisis”, that the therapist grasps this evolutionary potential, contained in suffering and obscurely expressed.

Secondly, the re-introduction into the system of the diachronic dimension of time, not only returns a sense of belonging to a story giving a historical meaning to suffering itself, but retrieves the value of the past, not by returning to a flat causal conception that proposes that the past “caused” the present, but in the sense that the past “is” in the present and continues to live in it. It continues to live there through myths, ghosts, cohesive whole of values and meanings that characterize the image (or the “representation”) that the family system has of itself, and that, therefore, can and should be investigated and sought.

This complex process, therefore, is certainly an attempt to recover that attention on the mental processes, centre of the theory of Bateson; it is an attempt to question the reasons, intentions, meanings that individuals attribute to their behaviour; it is a return of individuals on the systemic scene; it is a shift from the observable *pragmatic* interactions, to the *semantics* of the behaviours.

Family therapists find themselves, therefore, in front of the “black box” that the first cybernetics had considered irrelevant or unfathomable: they find themselves faced with a deeper and hidden level than that of the observable interactions, an “inner world” in the family where individuals are intensely involved and that we could call the “mythical level” (Caillé 1994; Neuburger 1994; Onnis et al. 1994b, 2012; Onnis 1996); it is the “emotional cement” deepened in the family, made up of beliefs, values and shared feelings.

With regards to the therapeutic implications, the exploration of this mythic level, such as the path of its construction, which usually has a tri-generational dimension, has greatly enriched the clinical practice and has inspired the creativity of family therapists toward the development of models of intervention more useful to bring out this dimension of family myths, being essentially pre-verbal and pre-conscious, which does not have direct access to the word. We refer to the richness of the therapeutic use of analogical and metaphorical language, in different methods of intervention (to name just a few examples of the “Floating objects” of Caillé and Rey 1994, and the “Family Time Sculptures” of Onnis et al. 1990, 1994a, 2012; Onnis 2004).

The Encounter with Constructive and Autoreferential Paradigms: The “Auto-observant” Systems

It is the second epistemological step that invested the systemic field, being perhaps more problematic than the former because it touches closely the therapeutic relationship and invests the position of the therapist inside the therapeutic process.

It proceeds from the critique of the mechanistic view, which results from empiricism, and suggests the possibility of an outside observer, separate and neutral in regards to the observed object (which, therefore in function of this separation can be “objectively” described).

This concept, already unsustainable in the field of physical-chemical science, where it is clear that the observer affects the observing field, could even more so, be criticized in a situation that directly involves the interpersonal relationship as the therapeutic process.

Also in this regard G. Bateson is a pioneer and an inspiration; in one of his first works from the early 1950s (Ruesch and Bateson 1951) he refers to psychiatry as a “reflexive science”. Successively the so-called “second-order cybernetics”, to use the terminology of von Foester (1984, 1994), the biological studies of Maturana and Verela (1980) on the self-referential of the systems, the constructivist guidelines in psychotherapy, explicate in a direct way the “constructive circularity” between the observer and the observed system. It results, in regard to therapy, that in the therapeutic system, being the therapist inevitably part of his own observation, is, in effect, “self-looking” and “self-referential”.

In truth, the therapist becomes part of the system in the exact moment he starts observing it; in fact and paradoxically, he could not know it without being a part of it. This is why the representation that the therapist provides of the system can never be completely objective, because the therapist, at the same time, helps to “build” the reality described.

The shift from an *epistemology of description to an epistemology of construction*, from an epistemology of observed systems to an epistemology of self-observant systems, provides at least two important results:

- The first relates to the cognitive sphere: once the myth of neutrality and separation has been abandoned (but yet very present in the models related to first cybernetics) the therapist withdraws the pretence of an objective knowledge of the therapeutic reality interpreted as an “absolute truth”.
- The second consequence relates more directly to the therapeutic process: the therapist losing its distant and “external” position, must also give up the claim to control the therapeutic process and predict outcomes. Its function is mainly to introduce in the system elements of greater complexity, to increase the range of choices in the stereotyped and single view that the system has of its own reality, so that it can reconsider it and restart the process of evolution. But it will be for the system itself to “create” the forms and directions, completely unpredictable, of the change, becoming ultimately, the “architect of his own healing” (to use one more expression of Bateson 1979).

This concept, which comes from an epistemological, self-referential, and constructivist orientation, is undoubtedly full of fascinating and important implications for psychotherapeutic practices.

By recognizing the creativity and autonomy capacities of the system being treated, the therapeutic process becomes free from any manipulation or control purposes. This is the reason why attitudes and techniques of “instructive” or “prescriptive”

type are replaced, today, with other dialogical types, in which a redefinition of the situation is proposed, that is, providing alternative views of reality rather than the rigid and univocal shared by the family system, reactivating the autonomous creative potential (Caillé 1994; Elkaïm 1989; Onnis 2004; Onnis et al. 2012).

At the same time, the recognition of the therapist as a “co-constructor” of the therapeutic reality invests him with a new responsibility, an “ethical function” (Keeney 1985; von Foester 1994). The therapist becomes, in fact, co-head of both the definition of the disease (which is also a “construction of reality”) and of the evolution and outcome of discomfort. In this frame, for example, a sharp revision of the concept of “chronicity” takes place: it is no longer considered as a natural result of the disease as suggested by the medical tradition, but it is seen as “a function of the therapeutic relationship”. Numerous studies, today, sustain this view (see among others Onnis 1985; Onnis et al. 1985, 2001).

At this point a question arises legitimately. What meanings do these epistemological steps that so heavily influenced the systemic orientation have? Placing the emphasis on the evolving time and the history of the system means that today systemic therapists have returned to the exploration of the past and withdrew from the study of the interactions in the present? Or enhancing the position of the observer means giving priority to the construction of reality of the observing subject rather than the “owned” reality of the object observed?

Encounter with the Complexity View

The answers to these questions are provided with the third encounter, the third intersection we have briefly mentioned: the one between systemic approach and the *view of complexity* (Morin 1977). The view of complexity allows to reformulate those questions and to replace the dichotomous and oppositional logic, of Cartesian derivation, that still inspires them, with a *logic of complementary and dialectic correlations* (Onnis 1989, 1993, 1994). This epistemological orientation has greatly influenced the systemic psychotherapy and has introduced both in the systemic vision as well as in therapeutic work, a more complex structure of levels: the behavioural level taking place in the “here and now” and the diachronic level of history and its meaning, the phenomenology of current interactions and family myths, the specificity of individuals and the characteristics of the systems to which they belong; the therapeutic system (with all the implications that it entails) and the in-treatment system, as co-participants, both the one and the other, which are implied in the construction of a new reality.

The interest and value of this epistemological approach also lies in the fact that it is proposed as a significant attempt to recover the multidimensionality of mental processes which, as we have seen, inspired the conception of Bateson. It's definitely the more mature and important development that characterizes systemic psychotherapy today.

Yet it is my impression that some of these issues discussed today in the systemic field are not a heritage of this area, but find harmonies and resonances in other areas of psychotherapy, including the psychoanalytical field.

I think that many psychotherapy fields tend today to emphasize the existence of contiguity and continuity, rather than delimitation, between subject and relational plot in which it is immersed, between the inner and outer world, proposing, therefore, that psyche and relatedness are far from being apart and opposing spaces, but rather on different levels, related, of the same human reality (among others see Stern 2004, 2006).

And this to me does not seem random. It does not seem random because it reflects a widespread tendency today that goes beyond the boundaries of school: to move towards a “perspective of complexity” and to get out from the confines of reductionism, through the recognition of a multiplicity of complex levels of reality that, in their autonomy, propose themselves as complementary and circularly related. It is not a coincidence that “complexus”, as suggested by Morin (1977) means “what is joined together to form a single fabric”; and to remain in this metaphor, you could add that the threads, on one side, maintain their specificity, on the other side they define their appearance and function as parts of a plot.

Towards a Complexity Ethics

Placing yourself in a prospective of complexity does not come without consequences on the methodological level. First, because of the recursive correlation of the multiple levels involved in the game, these classic Cartesian relationships of dichotomous opposition branching, are replaced by relationships of complementarity; consequently a disjunctive logic type either/or (either intrapsychic or relational, either inside world or the outside world, either individual or family etc.) are replaced with a logic of dialogical conjunctions of type both/and (intra-psychic *and* relational, inner world *and* outer world; individual *and* family etc.). Secondly an epistemology of complexity also differs from every “holistic” model claiming to be “all-encompassing” and exhaustive and, having the presumption to explain everything, it becomes dogmatic, because it does not allow other views of reality; these are models of “totality” which then tend to uniqueness of “totalitarianism”.

On the contrary if there is a keyword within the paradigm of complexity it is *plurality*. The need for a plurality of points of view arises from the realization that each reference model (including the systemic model) is necessarily limited and partial. There are different points of view to be considered from different angles of observation, which may allow a better approximation in the knowledge of observed reality, thanks to the comparison and integration among them.

It can then be concluded that if, on one hand the perspective of complexity offers to the therapist the frustration derived by a healthy immersion of humility, however, on the other hand it points out, the need for cooperation and convergence between different psychotherapeutic orientations, in respect of each other’s diversity.

In this sense, the optic of complexity recovers the richness of Bateson’s lesson where only the “difference is the matrix of information and knowledge” (Bateson 1972). But in the optics of complexity one final comment is appropriate: it has extremely important implications that go beyond the field of psychotherapy. If in

psychotherapy it favours the fall of dogmas, in the broader social field it promotes a culture of respect and tolerance.

There is an extensive need of this culture nowadays and, it is clear, especially in face of phenomena of resurgence of racism, discrimination against minorities, violence against women and children, and rejection of “diversity”, which dramatically characterize current society.

It is for this reason that we believe that a systemic thinking inspired by complexity may have a function that goes beyond the specific field of psychotherapy and really acquires an ethical function.

Acknowledgment I would like to thank Dr. Gloria Gabbard for the English translation.

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Origins and Originality in Family Therapy and Systemic Practice

Borcsa, M.; Stratton, P. (Eds.)

2016, XIV, 250 p. 22 illus., 13 illus. in color., Hardcover

ISBN: 978-3-319-39060-4